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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,447

02/23/2004

Hideki Kawai

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24367 7590 05/13/2008

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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

05/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,447	Applicant(s) KAWAI, HIDEKI	
	Examiner ELIZABETH A. BOLDEN	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS submitted 23 February 2004, 1 July 2005, 2 July 2007, and 21 September 2007 have been considered by the Examiner.

Drawings

The original drawings received on 23 February 2004 are accepted by the Examiner.

Election/Restrictions

Newly submitted claims 15-18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly presented claims 15-18 are directed towards a method of strengthening a glass which is classified in a different class and recognized as divergent subject matter than the glass substrate.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 15-18 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al., U.S. Patent Application Publication 2004/0242398 A1 in view of Matsuno et al., U.S. 7,040,953.

Mori et al. teaches an optical glass composition having overlapping ranges of components with instant claims 1, 2, and 9. See Abstract and paragraphs [0011]-[0018]. Mori et al. teaches an optical glass composition having overlapping ranges of properties with instant claims 3-7 and 10-14. See Abstract and paragraphs [0043]-[0048]. Claims 1, 8, and 9 define the product by how the product was made. Thus, claims 1, 8, and 9 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present case, the recited steps imply a structure of a flat glass with strengthened layers on the multiple surfaces or an information recording layer. The reference suggests such a product. See paragraphs [0041]-[0042] and [0051]-[0060].

Mori et al. fails to teach that the substrate is not strengthened on the surface of the information recording.

Matsuno et al. teach a glass substrate that has been chemically strengthened and then the strengthened layer is removed from the unwanted sides by polishing. See column 2, line 31 to column 3, line 45.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the glass substrate of Mori et al. and removed the unwanted strengthened surfaces as described by Matsuno et al.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speit et al., U.S. Patent 6,303,528 in view of Matsuno et al., U.S. 7,040,953

Speit et al. teaches an optical glass composition having overlapping ranges of components with instant claims 1, 2, and 9. See Abstract and column 2, line 46 to column 3, line 5. Claims 1, 8, and 9 define the product by how the product was made. Thus, claims 1, 8, and 9 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present case, the recited steps imply a structure of a flat glass with strengthened layers on the multiple surfaces or an information recording layer. The reference

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suggests such a product. See column 1, lines 17-60, column 4, lines 23-38, column 5, lines 20-40, and column 7, lines 15-29.

Speit et al. fails to teach that the substrate is not strengthened on the surface of the information recording.

Matsuno et al. teach a glass substrate that has been chemically strengthened and then the strengthened layer is removed from the unwanted sides by polishing. See column 2, line 31 to column 3, line 45.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the glass substrate of Speit et al. and removed the unwanted strengthened surfaces as described by Matsuno et al.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges as taught by Speit et al. would have the properties as recited in claims 3-7 and 10-14.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection. The Examiner has rewritten the rejections above to better clarify the rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAB

9 May 2008

/Jerry A Lorengo/
Supervisory Patent Examiner, Art Unit 1793